



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,056	03/02/2004	Jean-Louis Desjoyaux	1759.155	2862

23405 7590 03/08/2007  
HESLIN ROTHENBERG FARLEY & MESITI PC  
5 COLUMBIA CIRCLE  
ALBANY, NY 12203

EXAMINER
----------

A, PHI DIEU TRAN

ART UNIT	PAPER NUMBER
----------	--------------

3637

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/08/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

**Application No.**

10/791,056

**Applicant(s)**

DESJOYAUX ET AL.

**Examiner**

Phi D. A

**Art Unit**

3637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 5, 8, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desjoyaux (Fr2765909) in view of Benvenuto et al (5687526), Heath (6324796) and Greve (2072257).

Desjoyaux shows panels for producing swimming pools, each panel having a prefabricated structure (1) comprising a flat surface of rectangular overall shape and delimited by a peripheral frame comprising planar vertical flanges (1b) and horizontal flanges (1c), each flange extending from a respective edge of the flat surface (figure 1) wherein one of the planar vertical flanges has spaced apart, distributed over its height fixing arrangements (1j2) to collaborate with complementary arrangements (1k) on an other vertical flange of an adjacent panel, the fixing arrangement comprise anchoring tabs (1j2) formed in a thickness of the one planar vertical flange to be engaged in longitudinal centering and guiding shapes(1k) belonging to the other flange, an internal face of the structure is equipped directly at the time of its manufacture with studs having a head and a centering part able to collaborate with necked apertures exhibited by an independent reinforcing element acting as wall tie and hollow shaft for pouring of concrete, the studs and apertures being distributed over the entire height of the structure, a profile shape (figure 3, the part which extends beyond the flange from which part 1j1

Art Unit: 3637

extends) provided along an entire height of the vertical flanges protrudes beyond one of the vertical flanges at a level of said flat surface of the structure to ensure sealing once the tabs are engaged, the profile shaped comprising a bead resulting from an additional thickness of material.

Desjoyaux does not show the tabs extending coplanar with the one planar vertical flange, the tab each has on an outwardly oriented face anchoring roughness able to collaborate with complementary roughness after engagement the said shapes to ensure non-dismantleable self-locking, the centering and guiding shapes constitute longitudinally spaced apart wells or sleeves extending entirely away from an edge of the flat surface such that the sleeves are entirely located on an opposite side of the panel relative to the flat surface, and a longitudinal cross section of the wells or sleeves corresponds approximately to that of the tabs, a part of the one flange from which the sleeves or wells are formed having the anchoring roughness so that when the tabs have been engaged in the sleeves by a bearing force exerted in a plane parallel to the vertical flanges, a wedging effect is produced for imbricating the roughness, at least one of the wells or sleeves comprising a rear wall including said part, a pair of longitudinally spaced apart side wall members and a front wall member substantially U-shaped in a plane generally parallel to the rear wall.

Benvenuto et al shows a tabs (103, figure 4, figure 13) extending coplanar with the one vertical flange (54), the tab each having an outwardly oriented face, centering and guiding shapes (101) constitute longitudinally spaced apart wells or sleeves extending entirely away from an edge of the flat surface such that the sleeves are entirely located on an opposite side of the panel relative to the flat surface (39), a longitudinal cross section of the wells or sleeves corresponds approximately to that of the tabs.

Greve (figures 1, 5) shows tab (16') has on its outer face anchoring roughness (20) able to collaborate with complementary roughness (18) after engagement of the said shapes to ensure non-dismantleable self-locking, the tab(16') cooperating with the centering and guiding shapes, a longitudinal cross section of the wells or sleeves corresponds approximately to that of the tabs, a pair of longitudinally spaced apart side wall members (15) and a front wall member(17) substantially U-shaped in a plane generally parallel to the rear wall.

Heath shows a part of an outwardly oriented bearing surface of the other flange from which the sleeves or wells are formed having the complementary anchoring roughness so that when the tabs have been engaged in the sleeves by a bearing force exerted in a plane parallel to the vertical flanges, a wedging effect is produced for imbricating the roughness, at least one of the wells or sleeves comprising a rear wall (14) including said part.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Desjoyaux to show the tabs extending coplanar with the one planar vertical flange, the tab each has on an outwardly oriented face anchoring roughness able to collaborate with complementary roughness after engagement the said shapes to ensure non-dismantleable self-locking, the centering and guiding shapes constitute longitudinally spaced apart wells or sleeves extending entirely away from an edge of the flat surface such that the sleeves are entirely located on an opposite side of the panel relative to the flat surface, and a longitudinal cross section of the wells or sleeves corresponds approximately to that of the tabs, a part of the one flange from which the sleeves or wells are formed having the anchoring roughness so that when the tabs have been engaged in the sleeves by a bearing force exerted in a plane parallel to the vertical flanges, a wedging effect is produced for imbricating the roughness, at least one of the

Art Unit: 3637

wells or sleeves comprising a rear wall including said part, a pair of longitudinally spaced apart side wall members and a front wall member substantially U-shaped in a plane generally parallel to the rear wall because having a centering and guiding shape forming wells or sleeves extending entirely away from an edge of the flat surface, anchoring tabs extending coplanar with the vertical flange, the sleeves or wells having walls forming a substantially U-shaped in a plane generally parallel to the rear wall, would enable the quick, secure and spaced anchoring of panels together as taught by Benvenuto et al, and having tabs with anchoring roughness having outwardly facing orientation to mate with roughness on the back wall of the wells or sleeves, a longitudinal cross section of the wells or sleeves being approximately of the tabs would ensure the secure, easy fastening of the adjacent panels together as taught by Heath, and forming the sleeves or wells with a pair of longitudinally spaced apart side wall members and a front wall member substantially U-shaped in a plane generally parallel to the rear wall would enable the secure holding of the tab in place when inserted as taught by Greve.

Per claim 2, Desjoyaux as modified further shows the anchoring roughness comprises a number of straight and parallel very closely-packed teeth of a gullet tooth type per the teaching of Graham.

Per claim 3, Desjoyaux as modified shows the anchoring tabs result from two parallel cut-outs formed at right angles from a longitudinal edge of the one flange, the cut-outs extending through a full depth of the one flange, a length of the tab being less than a width of the one flange per the teaching of Benvenuto et al

Per claim 17, Desjoyaux as modified shows said substantially U-shaped front wall member comprising a pair of longitudinally spaced apart legs, each leg being joined to a

Art Unit: 3637

different respective side wall member, and lower ends of the legs being joined together by a cross piece.

3. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Desjoyaux (Fr2765909) in view of Benvenuto et al (5687526), Greve and Heath (6324796) as applied to claim 1 above and further in view of Taylor et al (4514104).

Desjoyaux as modified shows all the claimed limitations except for a free end of the anchoring tabs being chamfered.

Taylor et al (figure 2) shows a free end of the anchoring tabs being chamfered to allow for the easy connection and locking of panels together.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Desjoyaux's modified structure to show a free end of the anchoring tabs being chamfered as taught by Taylor et al because having a chamber/tapering surface at the beginning of a tab member would allow for easy insertion of the tab into an opening as the chamber/tapering surface would function as a guide for insertion.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Desjoyaux (Fr2765909) in view of Benvenuto et al (5687526), Greve and Heath (6324796).

Desjoyaux as modified shows all the claimed limitations except for a longitudinal width of the anchoring tabs being less than a longitudinal width of an internal section of the sleeves or wells except for a sleeve situated at an upper part of the structure, considered in a vertical direction, of which a longitudinal width of its internal section corresponds approximately to a longitudinal width of the tabs so as to allow heightwise adjustment of the panels.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Desjoyaux's modified structure to show a longitudinal width of the anchoring tabs being less than a longitudinal width of an internal section of the sleeves or wells except for a sleeve situated at an upper part of the structure, considered in a vertical direction, of which a longitudinal width of its internal section corresponds approximately to a longitudinal width of the tabs so as to allow heightwise adjustment of the panels because it is well known in the art that having only one tab and openings of closed dimension within a multiple of tabs and openings ensure the easy assembly of panel parts together, while reducing cost as the large tolerance between the multiple of mating parts allow for less manufacturing cost and ease of manipulation of the mating parts together, and the one precise coupling parts ensure the proper fastenings of the parts together.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Desjoyaux (Fr2765909) in view of Benvenuto et al (5687526), Greve, and Heath 6324796).

Desjoyaux as modified shows all the claimed limitations except for the structure being obtained directly by injection moulding of a plastic.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Desjoyaux's modified structure to show the structure being obtained directly by injection moulding of a plastic because injection moulding of plastic is a well known process for forming plastic, and using plastic in a swimming pool environment would enable the wall to avoid the rust factor over the long term which could create leakage.



Art Unit: 3637

6. Claims 9-13, 16, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desjoyaux (Fr2765909) in view of Benvenuto et al (5687526), Taylor et al, Greve (2072257) and Heath 6324796).

Desjoyaux shows panels to produce a swimming pools after juxtaposition assembly wherein each panel is made up of a prefabricated structure (1) comprising a flat surface of an overall rectangular shape delimited by a peripheral frame comprising vertical flanges (1b) and horizontal flanges (1c), the juxtaposition of the panels to produce the swimming pool is made by interconnecting vertical flanges of adjacent panels (per the parts 1js and part 1k), one flange of each vertical panel has distributed over its height, fixing tabs (1j2), an other vertical flange of each panel has spaced apart sleeves (1k), the entire sleeves are entirely located on an opposite side of the panel relative to the flat surface, the tabs are configured to be engaged in the sleeves of an other vertical flange of an adjacent panel, a bead (figure 3, the part which extends beyond the flange from which part 1j1 extends) formed at the juncture of the one and the other vertical flanges with the flat surface of said structure to form a sealing profile after engagement of the tabs in the sleeves, a bead resulting from an additional thickness of material, an internal face of the structure is equipped directly at the time of the manufacture with studs having a head and a centering part able to collaborate with necked apertures exhibited by an independent reinforcing element acting as wall tie and hollow shaft for pouring of concrete, the studs and apertures being distributed over the entire height of the structure.

Desjoyaux does not show each tab resulting from two parallel cut-outs formed perpendicularly from a free edge of the one flange, the sleeves projecting from a free longitudinal edge delimiting an internal cross section corresponding to a cross section of the tabs,

Art Unit: 3637

a length of the tabs being less than a width of the one flange, the tabs having flat cross section, an internal cross section delimited by edges of the sleeves are rectangular, the anchoring and complementary asperities comprising a number of straight and parallel very closely-packed teeth of a gullet tooth type and a free end of the tabs are chamfered, at least one sleeve having a front wall member substantially U-shaped in a plane generally parallel to the other vertical flange.

Benvenuto et al shows a tabs (103, figure 4, figure 13) resulting from two parallel cut-outs formed perpendicularly from a free edge of the one flange, sleeves (101) projecting from a free longitudinal edge delimiting an internal cross section corresponding to a cross section of the tabs, a length of the tabs being less than a width of the one flange, the tabs having flat cross section, an internal cross section delimited by edges of the sleeves are rectangular.

Heath shows tabs on its outwardly oriented face anchoring asperities cooperating after engagement of the tabs in the sleeves with complementary asperities formed directly on part of the other vertical flange.

Greve shows at least one sleeve having a front wall member substantially U-shaped in a plane generally parallel to the other vertical flange (10).

Taylor et al (figure 2) shows a free end of the anchoring tabs being chamfered to allow for the easy connection and locking of panels together.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Desjoyaux to show each tab resulting from two parallel cut-outs formed perpendicularly from a free edge of the one flange, the sleeves projecting from a free longitudinal edge delimiting an internal cross section corresponding to a cross section of the tabs, a length of the tabs being less than a width of the one flange, the tabs having flat cross section, an

Art Unit: 3637

internal cross section delimited by edges of the sleeves are rectangular, the anchoring and complementary asperities comprising a number of straight and parallel very closely-packed teeth of a gullet tooth type and a free end of the tabs are chamfered because having each tab resulting from two parallel cut-outs formed perpendicularly from a free edge of the one flange, the sleeves projecting from a free longitudinal edge delimiting an internal cross section corresponding to a cross section of the tabs, a length of the tabs being less than a width of the one flange, the tabs having flat cross section, an internal cross section delimited by edges of the sleeves are rectangular would enable the quick, secure and spaced anchoring of panels together as taught by Benvenuto et al, and having tabs with the anchoring and complementary asperities comprising a number of straight and parallel very closely-packed teeth of a gullet tooth type would ensure the secure, easy fastening of the adjacent panels together as taught by Heath, the tab having a chamber/tapering surface at the beginning of a tab member would allow for easy insertion of the tab into an opening as the chamber/tapering surface would function as a guide for insertion as taught by Taylor, and forming the sleeve with a front wall member substantially U-shape in a plane generally parallel to the other vertical flange would ensure the secure and strong locking together of the tabs and sleeve as taught by Greve.

Per claim 10, Desjoyaux as modified further shows the anchoring roughness comprises a number of straight and parallel very closely-packed teeth of a gullet tooth type per the teaching of Heath.

Per claim 18, Desjoyaux as modified shows said substantially U-shaped front wall member comprising a pair of longitudinally spaced apart legs, each leg being joined to a

Art Unit: 3637

different respective side wall member, and lower ends of the legs being joined together by a cross piece.

7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Desjoyaux (Fr2765909) in view of Benvenuto et al (5687526), Heath, Greve and Taylor et al.

Desjoyaux as modified shows all the claimed limitations except for a longitudinal width of the anchoring tabs being less than a longitudinal width of an internal section of the sleeves or wells except for a sleeve situated at an upper part of the structure, considered in a vertical direction, of which a longitudinal width of its internal section corresponds approximately to a longitudinal width of the tabs so as to allow heightwise adjustment of the panels.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Desjoyaux's modified structure to show a longitudinal width of the anchoring tabs being less than a longitudinal width of an internal section of the sleeves or wells except for a sleeve situated at an upper part of the structure, considered in a vertical direction, of which a longitudinal width of its internal section corresponds approximately to a longitudinal width of the tabs so as to allow heightwise adjustment of the panels because it is well known in the art that having only one tab and openings of closed dimension within a multiple of tabs and openings ensure the easy assembly of panel parts together, while reducing cost as the large tolerance between the multiple of mating parts allow for less manufacturing cost and ease of manipulation of the mating parts together, and the one precise coupling parts ensure the proper fastenings of the parts together.

Art Unit: 3637

8. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Desjoyaux (Fr2765909) in view of Benvenuto et al (5687526), Taylor et al, Greve (2072257) and Heath (6324796).

Desjoyaux as modified shows all the claimed limitations except for the structure being obtained directly by injection moulding of a plastic.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Desjoyaux's modified structure to show the structure being obtained directly by injection moulding of a plastic because injection moulding of plastic is a well known process for forming plastic, and using plastic in a swimming pool environment would enable the wall to avoid the rust factor over the long term which could create leakage.

#### ***Response to Arguments***

9. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art shows different locking device.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

Art Unit: 3637

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phi D A whose telephone number is 571-272-6864. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 571-272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phi Dieu Tran A



3/5/07

LANNA MAI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600

